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REMARKS

In the Office Action the Examiner noted that claims 1-7, 15-18, 20, and 23-25 are pending the application, and the Examiner rejected all claims. By this Amendment, claims 2-4, 7, and 23-25 have been amended, and claims 1, 5-6, 15-16, and 20 have been cancelled without prejudice or disclaimer. No new matter has been presented. Thus, claims 2-4, 7, 17-18, and 23-25 are pending and under consideration. The Examiner's rejections are traversed below, and reconsideration of all rejected claims is respectfully requested.

Claim Rejections Under 35 USC §102

In item 3 on pages 2-3 of the Office Action the Examiner rejected claims 1, 5, 7, 15, and 24-25 under 35 U.S.C. §102(b) as being anticipated by JP Publication No. 2000-090215, issued to Inudou et al. (hereinafter referred to as "Inudou"). By this Amendment, claims 1, 5, and 15 have been cancelled without prejudice or disclaimer. The Applicants respectfully traverse the Examiner's rejections of claims 7 and 24-25.

Claim 7 of the present application, as amended, recites "antennas which are arranged in a matrix on one plane," and which are driven alternatively, sequentially, or simultaneously so as to calculate "a two-dimensional location of the non-contact IC card on said one plane from communications with the non-contact IC card." As the Examiner has acknowledged that Inudou does not disclose or suggest at least this feature of claim 7, the Applicants respectfully submit that claim 7 patentably distinguishes over Inudou, as well as the other references cited in the Office Action, and further request the withdrawal of the Examiner's §102 rejection.

Amended claim 24 recites a control unit that drives the antennas so that the antennas are alternatively, sequentially, or simultaneously driven, and calculates a two-dimensional location of the non-contact IC card on one plane from communications with the non-contact IC card. Similarly, amended claim 25 recites calculating a two-dimensional location of the non-contact IC card on said one plane from communications with the non-contact IC card. Therefore, for reasons similar to those presented in regard to claim 7, the Applicants respectfully submit that claims 24 and 25 also patentably distinguish over Inudou, as well as the other references cited in the Office Action.

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Claim Rejections Under 35 USC §103

In item 4 on pages 3-4 of the Office Action the Examiner rejected claims 2-4 and 16-18 under 35 U.S.C. §103(a) as being unpatentable over Inudou in view of U.S. Patent Application Publication No. 2003/0052788, issued to Chung (hereinafter referred to as "Chung"). By this Amendment, claim 16 has been cancelled without prejudice or disclaimer. The Applicants respectfully traverse the Examiner's rejections of claims 2-4 and 17-18.

Claim 2 of the present application, as amended, recites antennas "arranged in a matrix on one plane," and which are driven to calculate "the two dimensional location of the non-contact IC card on said one plane." The Applicants respectfully submit that neither of the cited references, either alone or in combination, disclose or suggest at least this feature of claim 2.

As stated in the previous section of this Amendment, the Examiner acknowledged that Inudou is silent to the above feature. The Examiner then went on to state that Chung teaches an antenna array that is used to track tags/smart tags, and that the antennas are operated simultaneously when spatially separated or sequentially/temporally activated to reduce interference, citing paragraph [0070] of Chung.

Chung apparently discloses the use of all-orientation antennas to detect smart tags 200. However, the Applicants respectfully submit that the antennas of Chung are arranged in line, and are directed to sequentially detecting the one-dimensional location of the smart tags, as shown in Figure 2 of Chung. As disclosed in paragraph [0070], the antennas are activated sequentially in time to eliminate interference. This activation cannot detect the two-dimensional location of smart tags on the plane. This is in direct contrast to the claimed feature of claim 2 in which "the control unit alternatively drives the antennas...and...calculates the two dimensional location of the non-contact IC card on said one plane."

Further, even if the cited references did disclose or suggest all of the features of claim 2 of the present application, the Applicants respectfully submit that there would be no motivation for someone skilled in the art to combine the two references. The Examiner stated that one would be motivated to combine the references in order to accurately detect a card/tag using well known antenna array activation to suit the array. However, the Applicants respectfully note that the simultaneous activation of Chung is directed to eliminating interference, not detecting the two-dimensional location of the smart tags. Thus, those skilled in the art would not have any motivation to consider combining the teachings of Chung with Inudou.

Therefore, the Applicants respectfully submit that claim 2 patentably distinguishes over the cited references.

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Claims 3-4 and 17-18 also recite similar features to the patentably distinguishable feature of claim 2 discussed above. Thus, the Applicants respectfully submit that claims 3-4 and 17-18 also patentably distinguish over the cited references.

In item 5 on pages 4-5 of the Office Action the Examiner rejected claims 6 and 20 under 35 U.S.C. §103(a) as being unpatentable over Inudou. By this Amendment, claims 6 and 20 have been cancelled without prejudice or disclaimer.

In item 6 on page 5 of the Office Action the Examiner rejected claim 23 under 35 U.S.C. §103(a) as being unpatentable over Inudou in view of U.S. Patent No. 6,257,486, issued to Teicher (hereinafter referred to as "Teicher"). The Applicants respectfully traverse the Examiner's rejection of claim 23.

Amended claim 23 recites "driving the antennas so that the antennas are alternatively, sequentially, or simultaneously driven", and "calculating a two-dimensional location of the non-contact IC card on said one plane from communications with the non-contact IC card." As discussed previously in this Amendment, neither Inudou nor the other previously cited references disclose or suggest at least these features of claim 23. Further, as Teicher apparently merely discloses a contactless smart card with keypad to be used by an operator to communicate with an external device, Teicher does not cure the deficiencies of Inudou in regard to claim 23. Thus, the Applicants respectfully submit that claim 23 patentably distinguishes over the cited references.

Summary

In accordance with the foregoing, claims 2-4, 7, and 23-25 have been amended. Claims 1, 5-6, 15-16, and 20 have been cancelled. No new matter has been presented. Thus, claims 2-4, 7, 17-18, and 23-25 are pending and under consideration.

There being no further outstanding objections or rejections, it is respectfully submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

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Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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